



Texas Department of Insurance

# **Return-to-Work Outcomes for Texas Injured Employees**

December 2011 Results

**Workers' Compensation Research and Evaluation Group**  
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## 1. Introduction

House Bill (HB) 28 (78th Legislature, third called session) created a new workers' compensation research function at the Texas Department of Insurance (TDI) by transferring the research function of the former Research and Oversight Council on Workers' Compensation (ROC) to the agency.

Per Chapter 405 of the Texas Labor Code, the Workers' Compensation Research and Evaluation Group (REG) is responsible for conducting professional studies and research on various system issues, including the delivery of benefits, litigation and controversy, insurance rates and rate-making procedures, rehabilitation and reemployment of injured workers, workplace health and safety issues, the quality and cost of medical benefits, and other matters relevant to the cost, quality, and operational effectiveness of the workers' compensation system.

House Bill (HB) 7 (79th Legislature, Regular Session, 2005) included a new Section 405.0026, Texas Labor Code, which requires the Commissioner of Insurance to adopt an annual research agenda for the Workers' Compensation Research and Evaluation Group (REG) at the Texas Department of Insurance (TDI). Section 405.0026, Texas Labor Code, also requires TDI to post a proposed research agenda in the Texas Register for public review and comment and requires the Commissioner of Insurance to hold a public hearing on the research agenda if requested by a member of the public.

In accordance with the Fiscal Year 2011 research agenda, REG conducted an analysis of Return-To-Work (RTW) patterns of injured employees Receiving Temporary Income Benefits (TIBs) in the Texas workers' compensation system. The report examines initial and sustained RTW, as well as wage outcomes, days away from work, and pharmaceutical use.

## Data Sources

Quarterly wage data for the years 2005-2009 from the Texas Workforce Commission

Medical billing data for the injury years 2005-2009 collected by the Texas Department of Insurance, Division of Workers' Compensation

Injured employees income benefit and claim data for injury years 2005-2009 collected by the Texas Department of Insurance, Division of Workers' Compensation

## Return-to-Work Measures

### *Initial Return-to-Work (RTW)*

The percent of injured employees back at work for the first time after the injury. That figure was computed at five milestones after the work-related injury (six months, one year, one and a half years, two years, and three years).

### *Sustained RTW*

The percent of injured employees who returned and stayed employed for three or more consecutive quarters after the work-related injury. That figure was also computed at five milestones after the injury (six months, one year, one and a half years, two years, and three years).

### *Median Number of Weeks off Work*

Median number of weeks away from work is calculated using the date of injury, the dates when income benefits began and ended, and quarterly wage data.

## Methodology

The study population consists of employees injured between 2005 and 2009 who received Temporary Income Benefits (TIBs) as a result of their work-related injury.

### *Temporary Total Disability*

An injured employee is classified as having a Temporary Total Disability (TTD) if TIBs received were greater than or equal to 70 percent of the injured employee's average weekly wage.

### *Temporary Partial Disability*

An injured employee is classified as having a Temporary Partial Disability (TPD) if TIBs benefits paid to the injured employee are less than 70 percent of the injured employee's average weekly wage.

*TTD is required to compute the RTW date for injured employees who have sustained a TTD.*

## Return-to-Work Measurement

If there are wages in the quarter that TTD benefits end, then the actual date that benefits ended is considered the RTW.

If there are no wages in the quarter that TTD benefits end, then the next quarter with wages is considered the RTW quarter. The midpoint of that quarter is used to estimate the RTW date.

If an injured employee had earnings in the quarter after the injury, and had wages in the first and second quarters after the injury, then the first quarter with earnings is considered the RTW quarter. The midpoint of that quarter is used to estimate RTW date.

If an injured employee had earnings in the quarter after injury, but did not have two consecutive quarters of wages, the next quarter with wages is considered the RTW quarter. The midpoint of that quarter is used to estimate the RTW date.

The number of days off work is the number of days between the injury date and the RTW date.

## Pharmacy Data

### *Study time frame*

The results in this section are based on the first 12 months post injury for injury years 2005-2009.

### *Drug group*

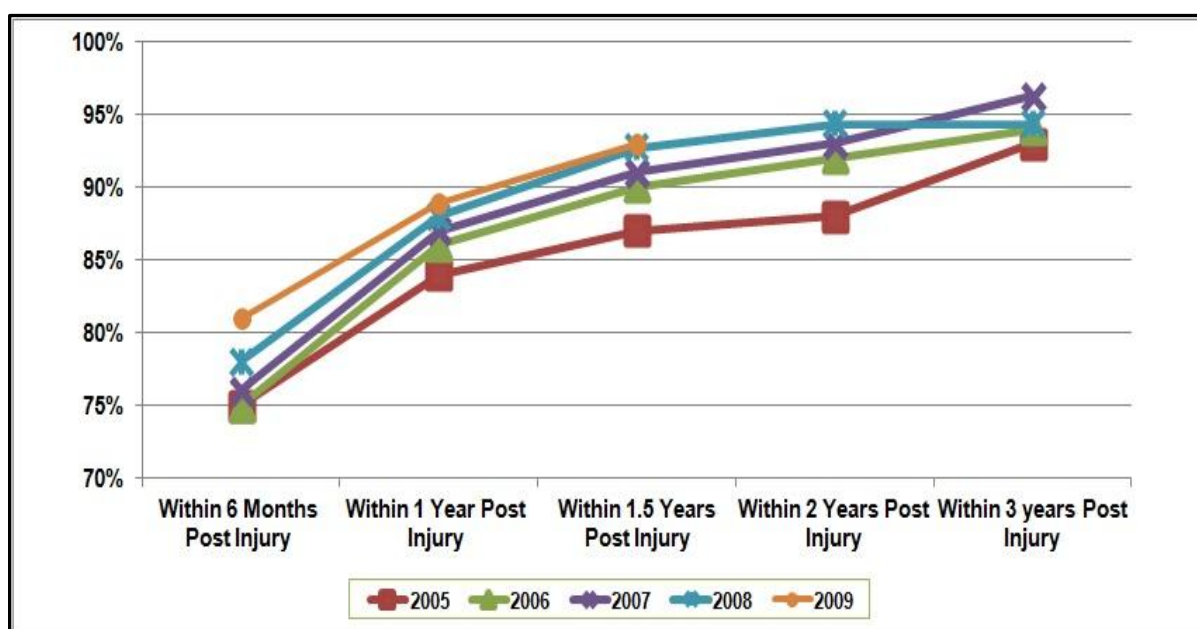
The drug group is based on the most frequently prescribed drug type within 70 drug groups, as developed by Medispan. The injured employee is then assigned to a drug group category based on the most frequently prescribed drug group. The drug groups are:

- Analgesics: opioid (34%);
- Analgesics: Anti-inflammatory (17%);
- Musculoskeletal: (14%); and
- Mood Stabilizers: Consists of anti-convulsants, hypnotics, and anti-anxiety agents (18%).

## 2. Initial Return-to-Work

### Initial Return-to-Work Rate

- Initial employment within six months increased from 75% in 2005 to 81% in 2009.
- RTW rates continued to increase at each milestone from 2005 to 2009.
- RTW rates by injury year increase from six-months to three-years post injury.
- In injury year 2008, however, RTW rates leveled off at 94% starting at the two-year milestone.
- Employees injured in 2009 returned to work within six months at higher rates than 2008, but the pattern of RTW after that follows the results of employee injured in 2008.



Description: This chart shows RTW rates within six months to within three years post-injury for injury years 2005 to 2009. Each injury year will have five milestones, which range from within six months to within three years post-injury. Only injury-years 2005 through 2008 will have results for the two- and three- year periods.

Injury Year	Within 6 Months Post Injury	Within 1 Year Post Injury	Within 1.5 Years Post Injury	Within 2 Years Post Injury	Within 3 years Post Injury
2005	75%	84%	87%	88%	93%
2006	75%	86%	90%	92%	94%
2007	76%	87%	91%	93%	96%
2008	78%	88%	93%	94%	94%
2009	81%	89%	93%		

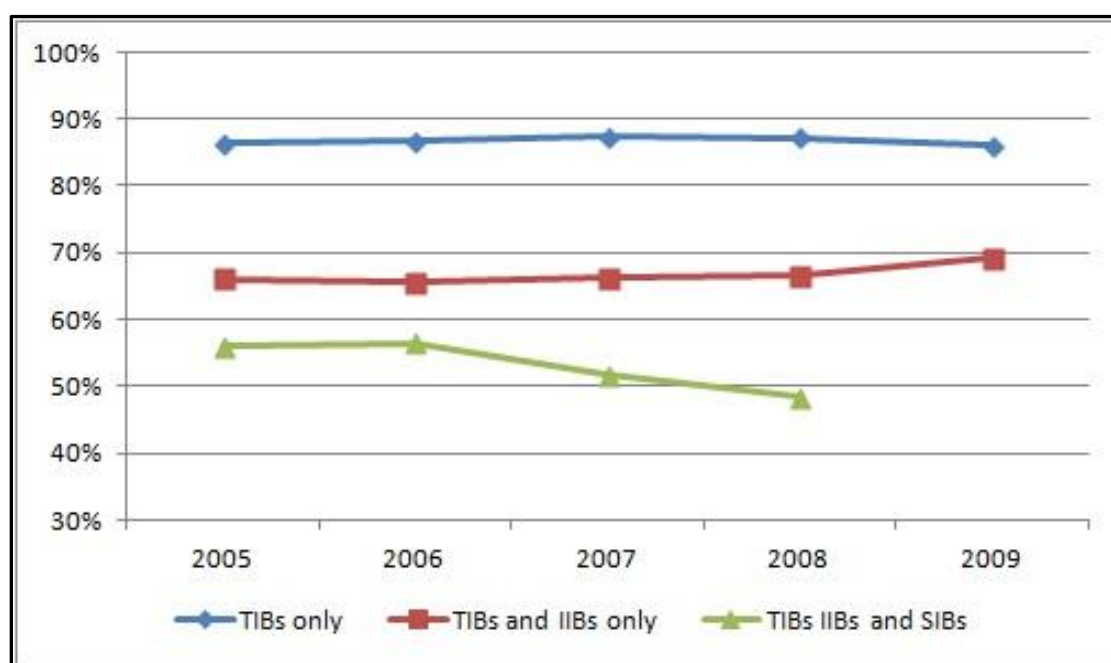
**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.



### Initial Return-to-Work by Benefit Type

- RTW rates are highest for TIBs recipients and lowest for SIBs recipients.
- The RTW rate for SIBs recipients decreased from 56% in 2005 to 48% 2009.
- The decline in the RTW rate for SIBs recipients appears to have begun in injury year 2006.
- The RTW rate for TIBs recipients dropped by one percentage point.
- The RTW rate for IIBs recipients increased by two percentage points from 2005 to 2009.



Description: This graph shows RTW by the benefit types TIBs, IIBs, and SIBs. With the exception of injury year 2009, all injury years have values for all injury years 2005 to 2009. Benefit type SIBs does not have a value for 2009 because data is not yet mature enough to include.

Injury Year	TIBs only	TIBs and IIBs only	TIBs IIBs and SIBs
2005	86%	66%	56%
2006	87%	66%	57%
2007	87%	66%	52%
2008	87%	67%	48%
2009	86%	69%	

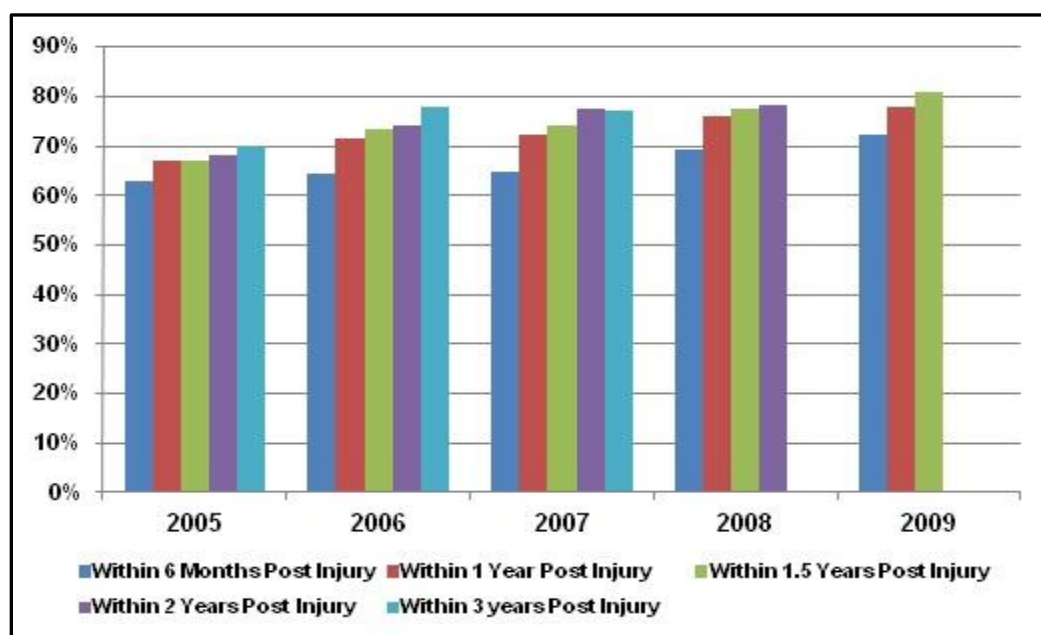
**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009

### Initial Return-to-Work at Pre-Injury Employer

- The RTW rate for 2005 injured employees increased from 63% within six months to 70% within three years.
- The RTW rate for 2006 injured employees increased from 64% within six months to 78% within three years.
- The RTW rate for 2007 injured employees increased from 65% within six months to 77% within three years.
- The RTW rate for 2008 injured employees increased from 69% within six months to 78% within two years.
- The RTW rate for 2009 injured employees increased from 72% within six months to 81% within 1.5 years.

Description: This table shows RTW for injured employees returning to work at their pre-injury employer. The table has five milestones that range from employment within six months to within three years for injury years 2005 to 2009.



Injury Year	Within 6 Mths Post Injury	Within 1 Yr Post Injury	Within 1.5 Yrs Post Injury	Within 2 Yrs Post Injury	Within 3 Yrs Post Injury
2005	63%	67%	67%	68%	70%
2006	64%	71%	73%	74%	78%
2007	65%	72%	74%	77%	77%
2008	69%	76%	78%	78%	
2009	72%	78%	81%		

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

### Return-to-Work by Employer Size, 1 to 3 Years Post-Injury

- RTW rates increased for the two smallest employer groups, from approximately 80% to approximately 88% within 3 years post-injury for injury years 2005 to 2009.
- Employers with one to four employees had a RTW rate of 88% in the first year for 2009 injuries, while employers with 500 or more employees had a rate of 93%.
- RTW at the two and three-year milestones declined for all employers, but was less precipitous for the largest employers.

Employer Size	2006			2007			2008		2009
	1 Yr Post-injury	2 Yrs Post-Injury	3 Yrs Post-injury	1 Yr Post-injury	2 Yrs Post-injury	3 Yrs Post-injury	1 Yr Post-injury	2 Yrs Post-injury	1 Yr Post-injury
1 to 4 employees	74%	84%	96%	80%	94%	94%	88%	88%	88%
5-9 employees	83%	90%	97%	81%	96%	94%	86%	86%	86%
10 to 49 employees	87%	92%	98%	87%	96%	94%	87%	87%	87%
50 to 99 employees	88%	94%	99%	88%	99%	95%	88%	88%	88%
100 to 499 employees	89%	94%	99%	90%	99%	96%	90%	90%	90%
500 or more employees	92%	96%	97%	92%	95%	97%	93%	93%	93%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

**Description:** This table shows RTW rates by size of employer (number of employees) from one to three years post-injury. Size of employer consists of five groups of employers: 1 to 5, 5 to 9, 10 to 49, 50 to 99, 100 to 499, and 500 or more employees. Data are presented for injury years 2005 to 2009. Injury year 2009 has data for the six month and one year post-injury milestones. Injury year 2008 has data for the one and two year milestones.

### Return-to-Work by Industry, 1 to 3 Years Post-Injury

- RTW rates of most industries improved from one to three years post-injury.
- Mining, construction, and agriculture had the lowest RTW rates for injury year 2009.
- Public Administration had the highest first year RTW rates in three out of five injury years.
- Construction had the lowest first year RTW rates in three out of five injury years.
- First-year RTW rates for all industries declined from 91% in 2007 to 89% in 2009.

Two-digit NAICS Code	2007			2008		2009
	1 Yr Post-injury	2 Yrs Post-injury	3 Yrs Post-injury	1 Yr Post-injury	2 Yrs Post-injury	1 Yr Post-injury
Agri., Forestry, Fishing, and Hunting	85%	85%	94%	85%	92%	83%
Mining	86%	86%	94%	85%	91%	81%
Utilities	97%	96%	99%	95%	100%	95%
Construction	84%	83%	93%	84%	89%	82%
Manufacturing	92%	91%	97%	91%	95%	89%
Wholesale Trade	93%	92%	97%	92%	96%	90%
Retail Trade	92%	91%	97%	92%	96%	91%
Transportation and Warehousing	93%	93%	97%	91%	96%	91%
Information	96%	96%	99%	93%	97%	92%
Finance and Insurance	96%	95%	98%	92%	97%	91%
Real Estate and Rental and Leasing	89%	88%	95%	88%	93%	86%
Prof/ Scientific, and Technical Services	90%	90%	95%	87%	91%	86%
Mgmt of Companies and Enterprises	96%	93%	96%	94%	99%	91%
Admin/ Support/ Waste Mgt/ Rem. Svcs.	85%	84%	93%	84%	89%	84%
Educational Services	95%	94%	98%	95%	98%	94%
Health Care and Social Assistance	94%	93%	97%	93%	96%	93%
Arts, Entertainment, and Recreation	89%	88%	94%	91%	95%	89%
Accommodation and Food Services	92%	90%	95%	89%	94%	89%
Other Services (except Public Admin.	91%	91%	96%	89%	92%	86%
Public Administration	96%	96%	100%	96%	99%	95%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

**Description:** This table shows RTW rates from one to three years post-injury for 21 two-digit industry NAICS codes. Data are presented for injury years 2005 to 2009. Injury year 2009 has data for the six month and one year post-injury milestones. Injury year 2008 has data for the one and two year milestones. The industries are agriculture, forestry, fishing, and hunting, mining, utilities, construction, manufacturing, wholesale and retail trade, real estate, rentals, and leasing, professional, management, administrative, support, waste management, and remedial services, educational services, health care and social assistance, arts, entertainment and recreation, accommodation and food services, other services, and public administration.

### Return-to-Work by Body Part, 1 to 3 Years Post-Injury

- RTW rates for most body parts improved from one to three years post-injury.
- Injuries to the lower extremities sustained the highest first year RTW rates for all five years.
- First year RTW rates were lowest for nervous system injuries for four out of five years.

Body Part	2007			2008		2009
	1 Yr Post-injury	2 Yrs Post-injury	3 Yrs Post-injury	1 Yr Post-injury	2 Yrs Post-injury	1 Yr Post-injury
Back	86%	92%	94%	86%	91%	86%
Knee	91%	96%	97%	90%	95%	89%
Lower Extremity	92%	96%	97%	92%	96%	91%
Neck	85%	91%	94%	86%	91%	85%
Nervous System	82%	90%	92%	81%	84%	82%
Shoulder	89%	95%	97%	88%	95%	85%
Upper Extremity	92%	96%	97%	92%	96%	90%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

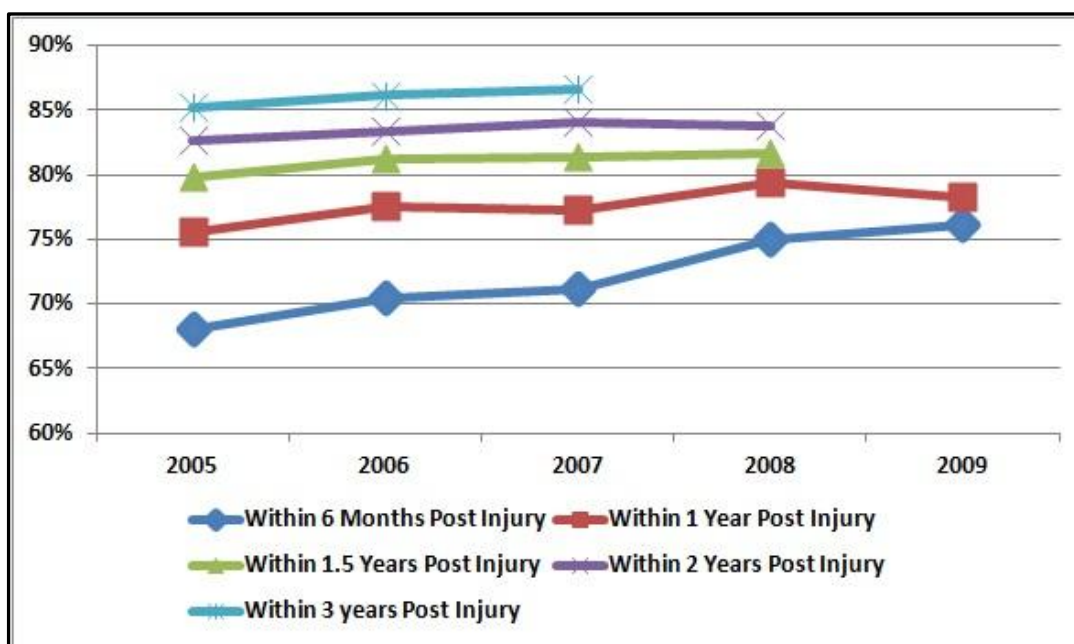
**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

**Description:** This table shows RTW rates by body part from one to three years post-injury. There are five body parts included in the table, which are the back, knee, lower extremities, neck, nervous system, shoulder, and upper extremities. Data are presented for injury years 2005 to 2009. Injury year 2009 has data for the six month and one year post-injury milestones. Injury year 2008 has data for the one and two year milestones.

### 3. Sustained Return-to-Work Rates

#### Sustained employment within Three Years

- Sustained employment within six months increased from 75% in 2008 to 76% in 2009.
- Sustained employment increased from within six months to three years post-injury for all injury years.
- Injury 2009 injured employees saw the smallest percentage point change from six months to one year post-injury, increasing from 76% to 78%, one percentage point lower than for 2008 injured employees.



Description: This graph shows sustained RTW rates ranging from within six months to within three years. This data is provided for injury years 2005 to 2009. Injury year 2009 has data for the six month and one year post-injury milestones. Injury year 2008 has data for the one and two year milestones.

Injury Year	Within 6 Months Post Injury	Within 1 Year Post Injury	Within 1.5 Years Post Injury	Within 2 Years Post Injury	Within 3 years Post Injury
2005	68%	76%	80%	83%	85%
2006	70%	77%	81%	83%	86%
2007	71%	77%	81%	84%	87%
2008	75%	79%	82%	84%	
2009	76%	78%			

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data.

## 4. Post-Injury Wages of Injured Employees

### Injured Employees Earning Wages At or Higher than Their Pre-injury Wages

- Sustained employment within six months earning equal or higher than pre-injury wages continues to decline in each injury year, dropping from 47% in 2005 to 40% in 2009.
- The percent of injured employees reaching sustained employment continues to decline for the other milestones as well.

Injury Year	Within 6 Mths Post Injury	Within 1 Yr Post Injury	Within 1.5 Yrs Post Injury	Within 2 Yrs Post Injury	Within 3 Yrs Post Injury
2005	47%	60%	67%	71%	76%
2006	47%	61%	67%	71%	75%
2007	48%	61%	67%	71%	74%
2008	46%	56%	62%	66%	
2009	40%	51%	60%		

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data.

Description: This table shows the percent of injured employees returning to sustained work making the same or higher wages within six months. This data is provided for injury years 2005 to 2009. Injury year 2009 has data for the six month, one year, and 1.5 years post-injury milestones. Injury year 2008 has data for the one and two year milestones.

## 5. Return-to-Work of Injured Employees by Selected Characteristics

### Injured Employees Back at Work by Body Part, 1 to 3 Years Post-Injury

- Sustained RTW rates by body part follow the same pattern as sustained RTW in general.
- First-year sustained RTW rates are declining for all injuries.
- Sustained RTW rates are the lowest for injuries to the nervous system, although there are relatively few injuries.
- Back and neck injuries have the next lowest sustained RTW rates.
- Injuries to the shoulder, knee, and the upper and lower extremities have the highest sustained RTW rates.

Body Part	2006			2007			2008		2009
	1 Yr Post Injury	2 Yrs Post Injury	3 Yrs Post Injury	1 Yr Post Injury	2 Yrs Post Injury	3 Yrs Post Injury	1 Yr Post Injury	2 Yrs Post Injury	1 Yr Post Injury
Back	74%	81%	82%	75%	80%	81%	72%	78%	71%
Knee	83%	88%	89%	85%	88%	89%	82%	87%	82%
Lower Extremity	84%	89%	90%	85%	89%	89%	83%	87%	82%
Neck	71%	79%	80%	73%	78%	80%	72%	77%	70%
Nervous System	68%	76%	77%	69%	74%	75%	68%	72%	61%
Shoulder	80%	87%	87%	81%	86%	87%	79%	84%	78%
Upper Extremity	85%	90%	90%	85%	89%	89%	84%	87%	82%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data.

**Description:** This table shows sustained RTW rates from one to three years post-injury by body part. There are five body parts included in the table, which are the back, knee, lower extremities, neck, nervous system, shoulder, and upper extremities. This data are provided for injury years 2005 to 2009. Injury year 2009 has data for the one year milestone. Injury year 2008 has data for the one and two year milestones.



### Injured Employees Back at Work Region, 1 Year to 3 Years Post-Injury

- The north and central regions have the highest RTW rates.
- The east region has the lowest, with a one-year sustained RTW of 75% in injury year 2009.

Region	2006			2007			2008		2009
	1 Yr Post Injury	2 Yrs Post Injury	3 Yrs Post Injury	1 Yr Post Injury	2 Yrs Post Injury	3 Yrs Post Injury	1 Yr Post Injury	2 Yrs Post Injury	1 Yr Post Injury
North	79%	85%	88%	78%	85%	87%	80%	84%	79%
Central	80%	85%	88%	79%	84%	87%	81%	84%	81%
East	76%	82%	84%	73%	82%	83%	76%	82%	75%
South	76%	82%	85%	77%	84%	85%	79%	84%	78%
West	78%	84%	86%	77%	85%	85%	77%	84%	77%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data.

**Description:** This table shows sustained RTW rates from one to three years post-injury by region. This data is provided for injury years 2005 to 2009. Injury year 2009 has data for the one year milestone. Injury year 2008 has data for the one and two year milestones.

### Injured Employees Back at Work by Industry, 1 to 3 Years Post-Injury

- Sustained RTW patterns by industry mirror patterns for sustained RTW in general.
- Agriculture, mining, construction, and Administrative and Support and Waste Management and Remediation Services have to lowest sustained RTW rates.
- Utilities, educational services, public administration, and information industries have the best sustained RTW rates.

Two-digit NAICS Code	2007			2008		2009
	1 Yr Post Injury	2 Yrs Post Injury	3 Yrs Post Injury	1 Yr Post Injury	2 Yrs Post Injury	1 Yr Post Injury
Agri./ Forestry/ Fishing/Hunting	70%	82%	81%	69%	76%	67%
Mining	73%	82%	82%	69%	75%	65%
Utilities	92%	95%	94%	92%	94%	89%
Construction	70%	79%	80%	69%	75%	63%
Manufacturing	83%	88%	89%	81%	85%	79%
Wholesale Trade	83%	88%	89%	83%	86%	81%
Retail Trade	80%	86%	88%	83%	86%	78%
Transportation and Warehousing	85%	90%	91%	84%	88%	83%
Information	91%	95%	94%	89%	92%	88%
Finance and Insurance	90%	92%	94%	88%	90%	87%
Real Estate and Rental and Leasing	76%	82%	83%	74%	82%	71%
Prof/ Scientific, and Technical Services	78%	83%	83%	78%	83%	75%
Mgt of Companies and Enterprises	89%	91%	91%	81%	86%	82%
Admin/ Support/ Waste Mgt/ Rem. Svcs.	68%	77%	78%	67%	73%	66%
Educational Services	87%	91%	91%	89%	91%	88%
Health Care and Social Assistance	84%	88%	89%	83%	86%	83%
Arts, Entertainment, and Recreation	79%	83%	84%	73%	77%	72%
Accommodation and Food Services	79%	83%	84%	76%	83%	76%
Other Services (except Public Admin.	78%	86%	86%	77%	82%	74%
Public Administration	92%	95%	94%	94%	94%	91%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data.

**Description:** This table shows sustained RTW rates from one to three years post-injury by Industry. This data is provided for injury years 2005 to 2009. Injury year 2009 has data for the one year milestone. Injury year 2008 has data for the one and two year milestones. The industries are agriculture, forestry, fishing, and hunting, mining, utilities, construction, manufacturing, wholesale and retail trade, real estate, rentals, and leasing, professional, management, administrative, support, waste management, and remedial services, educational services, health care and social assistance, arts, entertainment and recreation, accommodation and food services, other services, and public administration.

### Injured Employees Back at Work by Employer Size, 1 to 3 Years Post-Injury

- Overall, sustained RTW rates at one year post-injury have declined from injury year 2005-2009.
- Smaller employers have the lowest sustained RTW rates.
- Decreasing sustained RTW rates starting in 2008 are more pronounced among smaller employers.

Employer Size	2006			2007			2008		2009
	1 Yr Post Injury	2 Yrs Post Injury	3 Yrs Post Injury	1 Yr Post Injury	2 Yrs Post Injury	3 Yrs Post Injury	1 Yr Post Injury	2 Yrs Post Injury	1 Yr Post Injury
1 to 4 employees	71%	79%	77%	77%	81%	82%	76%	79%	68%
5-9 employees	73%	80%	81%	78%	85%	85%	74%	79%	65%
10 to 49 employees	74%	81%	84%	76%	83%	83%	73%	78%	71%
50 to 99 employees	76%	84%	86%	77%	84%	84%	74%	80%	73%
100 to 499 employees	78%	85%	87%	80%	85%	85%	78%	83%	76%
500 or more employees	84%	89%	91%	84%	89%	89%	84%	87%	83%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

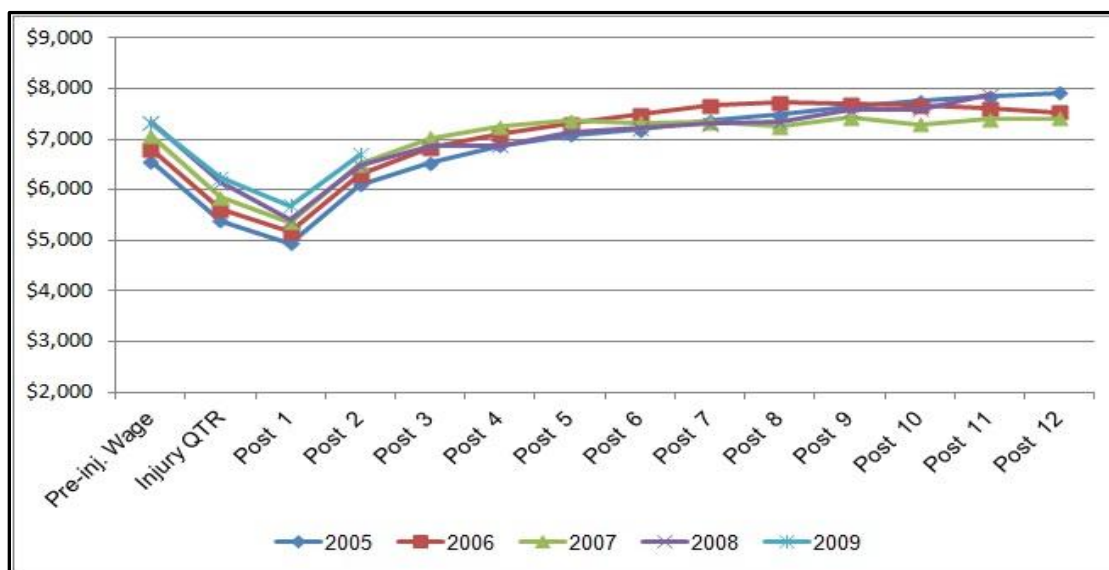
**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data.

**Description:** This table shows sustained RTW rates from one to three years post-injury by employer size. This data is provided for injury years 2005 to 2009. Size of employer consists of five groups of employers: 1 to 5, 5 to 9, 10 to 49, 50 to 99, 100 to 499, and 500 or more employees. This data is provided for injury years 2005 to 2009. Injury year 2009 has data for the one year milestone. Injury year 2008 has data for the one and two year milestones.

## 6. Wage Outcomes

### Median Pre- and Post-Injury Quarterly Wage Data for Injured Employees Receiving TIBs

- Wages drop 22% to 25% during the first quarter after injury.
- Injured employees return to pre-injury wages within 12 months on average.
- Recent injured employees take longer to return to pre-injury wages.



Description: This table shows quarterly wage data for TIBs recipients for three years post-injury, for injury years 2005 to 2009. Injury year 2009 has data for three quarters post-injury, and injury year 2008 has data for 11 quarters post-injury.

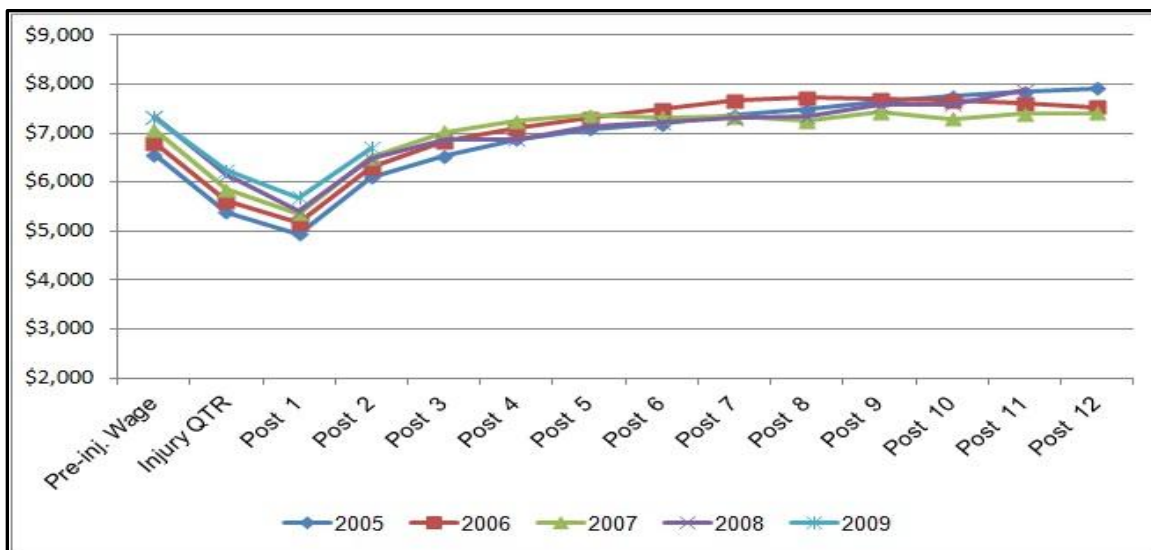
Injury Year	2005	2006	2007	2008	2009
Pre-inj. Wage	\$6,573	\$6,800	\$7,071	\$7,344	\$7,331
Injury QTR	\$5,397	\$5,619	\$5,855	\$6,144	\$6,239
Post 1	\$4,945	\$5,180	\$5,361	\$5,415	\$5,693
Post 2	\$6,111	\$6,298	\$6,510	\$6,472	\$6,705
Post 3	\$6,529	\$6,836	\$7,030	\$6,871	
Post 4	\$6,880	\$7,094	\$7,264	\$6,885	
Post 5	\$7,094	\$7,319	\$7,375	\$7,135	
Post 6	\$7,203	\$7,500	\$7,327	\$7,219	
Post 7	\$7,363	\$7,667	\$7,347	\$7,316	
Post 8	\$7,486	\$7,740	\$7,253	\$7,340	
Post 9	\$7,632	\$7,702	\$7,434	\$7,581	
Post 10	\$7,760	\$7,665	\$7,298	\$7,599	
Post 11	\$7,847	\$7,611	\$7,394	\$7,881	
Post 12	\$7,927	\$7,539	\$7,419		

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data. Highlighted cells indicate the approximate quarter at which injured employees return to pre-injury wages.

### Median Pre- and Post-Injury Quarterly Wages for Injured Employees Receiving IIBs

- Most injured employees receiving IIBs return to pre-injury wage levels within approximately one to two years.
- Wages in injury year 2006 appear to have leveled off around two years post-injury.
- Wages continue to improve for injuries sustained in 2007 and 2008, although reaching pre-injury wage levels occurs much later for injuries occurring in 2008.



Description: This table shows quarterly wage data for IIBs recipients for three years post-injury, for injury years 2005 to 2009. Injury year 2009 has data for three quarters post-injury, and injury year 2008 has data for 11 quarters post-injury.

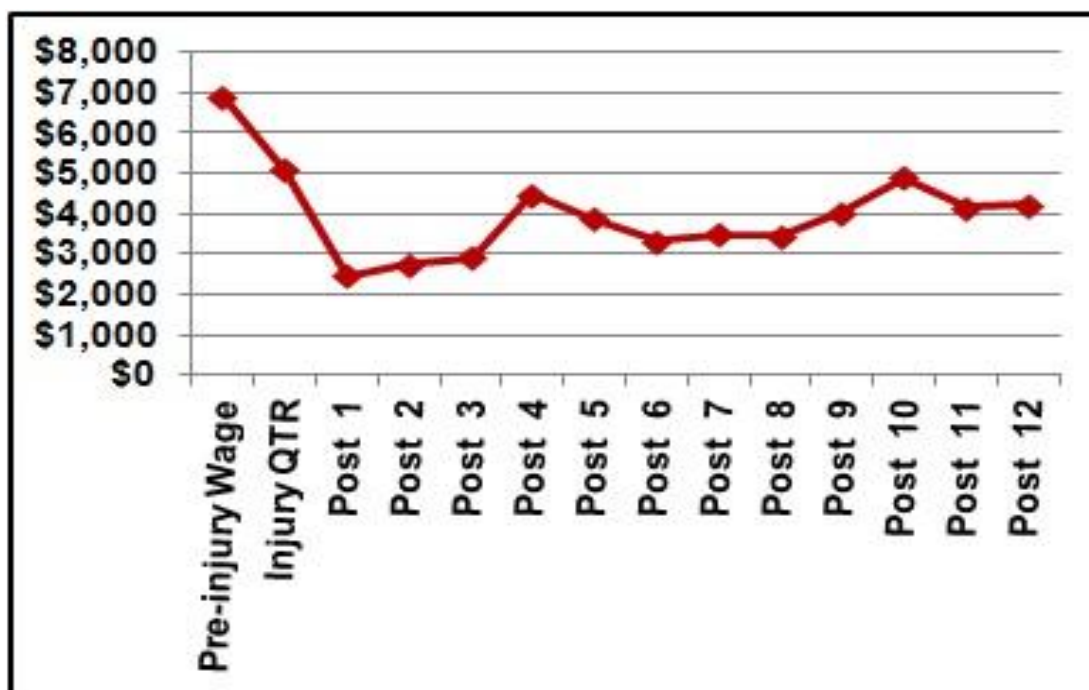
	2005	2005	2006	2007	2008	2009
Pre-injury Wage	\$5,964	\$6,645	\$7,020	\$7,358	\$7,929	\$8,100
Injury QTR	\$5,256	\$5,272	\$5,564	\$5,968	\$6,370	\$6,485
Post 1	\$4,011	\$4,154	\$4,388	\$4,641	\$4,760	\$4,903
Post 2	\$5,280	\$5,591	\$5,798	\$6,003	\$6,022	\$6,383
Post 3	\$6,057	\$6,240	\$6,519	\$6,767	\$6,758	
Post 4	\$6,488	\$6,751	\$6,939	\$7,207	\$7,103	
Post 5	\$6,848	\$7,050	\$7,243	\$7,414	\$7,388	
Post 6	\$6,978	\$7,155	\$7,500	\$7,478	\$7,621	
Post 7	\$7,115	\$7,348	\$7,675	\$7,539	\$7,751	
Post 8	\$7,164	\$7,455	\$7,729	\$7,580	\$7,742	
Post 9	\$7,316	\$7,507	\$7,715	\$7,530	\$7,966	
Post 10	\$7,448	\$7,672	\$7,753	\$7,651	\$7,978	
Post 11	\$7,519	\$7,816	\$7,635	\$7,724	\$7,982	
Post 12	\$7,640	\$7,930	\$7,638	\$7,844		

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008, and the second and third years of 2009 are excluded due to insufficient data.

### Median Pre- and Post-Injury Quarterly Wages for Injured Employees Receiving SIBs

- Injured employees receiving SIBs payments do not return to pre-injury wages within three years.
- Wages drop 64% from pre-injury to first quarter post-injury.
- Wages earned after the injury quarter are typically 46% lower than pre-injury wages for three years post-injury.



Description: This table shows quarterly wage data for SIBs recipients for three years post-injury, for injury years 2005 to 2008. Injury years 2005 to 2008 are combined because there are too few cases within individual injury years.

Wage Quarter	Pre-injury Wage	Injury QTR	Post 5	Post 6	Post 7	Post 8	Post 9	Post 10	Post 11	Post 12
Wage	\$6,894	\$5,084	\$3,861	\$3,338	\$3,500	\$3,458	\$4,035	\$4,891	\$4,168	\$4,234

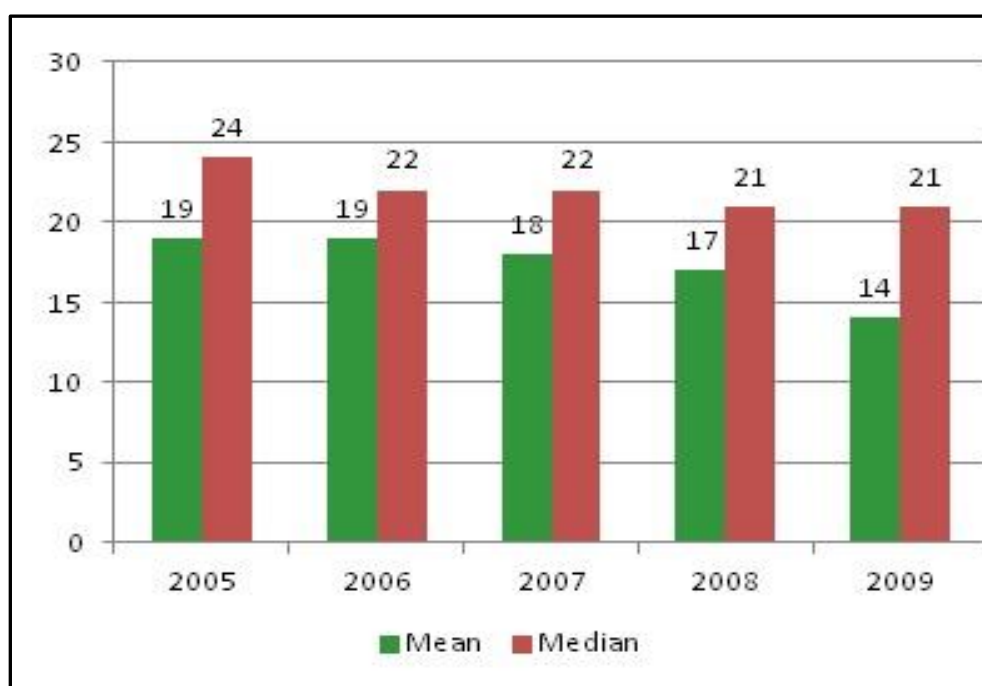
**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population is 223,187 employees injured in 2005-2010 who also received Temporary Income Benefits (TIBs). The third year of 2008 and the second and third years of 2009 are excluded due to insufficient data.

## 7. Days Away from Work

### Overall Days Away from Work

- The median days away from work has decreased from 24 days in injury year 2005 to 21 days in 2009.
- The number of median days away from work appeared to level out at approximately 22 days in 2006 and 2007, and at 21 days for 2008 and 2009.
- The average days away from work continues to decline, indicating the presence of cases with very low numbers of days away from work.



**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

Description: This graph shows overall mean and median number of days away from work for injury years 2005 to 2009.

### Median Days off Work by Body Part

- Employees with injuries to the knee or nervous system have the highest median days away from work over the five-year period.
- Injury years 2007 and 2008 have the highest median days away from work across all injury types.

Body Part	2005	2006	2007	2008	2009
Back	22	21	21	23	20
Knee	24	22	25	32	23
Lower Extremity	21	21	21	24	21
Neck	21	21	21	22	20
Nervous System	17	22	28	30	22
Other	21	21	21	25	20
Shoulder	22	22	22	28	21
Upper Extremity	21	21	21	24	21

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

Description: This table shows median days away from work by body part for injury years 2005 to 2009. There are eight body parts included in the table, which are the back, knee, lower extremities, neck, nervous system, shoulder, and upper extremities.



### Median Days Away from Work by Industry

- There are no clear-cut patterns in days away from work by industry.
- The management of companies and enterprises has the highest median days away from work at 25 days.
- Days away from work by injury year are similar.

Industry	2005	2006	2007	2008	2009
Agriculture Forestry Fishing Hunting	21	24	28	24	20
Mining	20	20	19	18	21
Utilities	19	18	18	21	18
Construction	21	23	22	20	21
Manufacturing	21	21	21	21	21
Wholesale Trade	21	21	20	19	20
Retail Trade	21	20	20	19	19
Transportation and Warehousing	20	19	19	19	20
Information	18	21	21	18	19
Finance and Insurance	25	25	19	21	21
Real Estate and Rental and Leasing	21	19	23	20	21
Professional Sci. Tech. Services	22	21	21	21	21
Management of Companies and Enterprises	32	28	22	19	25
Admin, Support, Waste Mgt, Rem. Services	24	25	23	21	22
Educational Services	21	21	20	21	21
Health Care and Social Assistance	21	21	21	21	21
Arts, Entertainment, and Recreation	21	21	27	17	21
Accommodation and Food Services	21	21	22	21	21
Other Services (except Public Admin)	22	26	26	20	22
Public Administration	19	18	18	19	18

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011. **Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

**Description:** This table shows median days away from work by Industry. This data is provided for injury years 2005 to 2009. The industries are agriculture, forestry, fishing, and hunting, mining, utilities, construction, manufacturing, wholesale and retail trade, real estate, rentals, and leasing, professional, management, administrative, support, waste management, and remedial services, educational services, health care and social assistance, arts, entertainment and recreation, accommodation and food services, other services, and public administration.

### Median Days Away from Work by Region

- Median days away from work across all injury years are highest in the western region at approximately 25 days.
- Median days away from work decreases from 24 days in 2005 to 20 days away from work in 2009.

Region	2005	2006	2007	2008	2009
North	24	23	24	22	19
Central	24	22	22	22	19
East	25	23	23	22	20
South	23	22	22	21	19
West	26	28	26	22	21

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

Description: This table shows median days away from work by region. This data is provided for injury years 2005 to 2009. The regions consist of the north, central, east, south, and west regions.

### Median Days Away from Work by Age

- The median days away from work among age groups are similar across injury years.
- The youngest age group (16-29 years) and the oldest (65 years and above) have the highest median days away from work in 2005, but in 2009 their results are similar to the other age groups.

Age	2005	2006	2007	2008	2009
16-29	25	22	22	21	21
30-39	22	22	22	21	20
40-49	23	23	23	21	21
50-59	22	22	22	21	21
60-64	22	22	22	21	20
65 and above	26	24	22	22	20

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

Description: This table shows median days away from work by age groups. This data is provided for injury years 2005 to 2009. The age groups are 16-29, 30-39, 40-49, 50-59, 60-64, and 65 and above.

## 8. Pharmaceuticals and RTW

### Distribution of Prescriptions by Drug Group of Injured Employees Receiving TIBs

- Opioid use has decreased slightly from 66% in 2007 to 64% in 2009.
- Ant-inflammatory use has increased slightly from 25% in 2007 to 27% in 2009.
- Overall patterns of use are otherwise fairly stable across injury years.

Drug Group	2005		2006		2007		2008		2009	
	N	%	N	%	N	%	N	%	N	%
Analgesics - Anti-Inflammatory	5453	25%	5572	25%	6040	25%	6587	26%	6281	27%
Analgesics – Opioid	14255	66%	14480	66%	15972	66%	16340	65%	15070	64%
Mood Stabilizers	803	4%	733	3%	748	3%	721	3%	674	3%
Musculoskeletal Therapy Agents	1226	6%	1226	6%	1351	6%	1467	6%	1432	6%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

**Description:** This table shows the use of four drug groups for injury years 2005 to 2009. The drug groups are anti-inflammatory analgesics and opioid analgesics, mood stabilizers, and musculoskeletal therapy agents.

### Employed and Unemployed Injured Employees with Back Injuries

- A higher percentage of injured employees that attain sustained employment within six months receive prescriptions within the first month after the injury.
- 66% of injured employees employed within six months received anti-inflammatory agents within the first month, in contrast to 52% of those not employed within six months.
- 18% of injured employees employed within six months received mood stabilizers within the first month.
- 35% of injured employees employed within six months received mood stabilizers within 1 year post-injury.

Drug Group	Sustained Employment within 6 Months	1 mth	2 mths	3 mths	4 mths	5 mths	6 mths	1 year
Analgesics - Anti-Inflammatory	Employed	72%	10%	5%	3%	2%	2%	7%
	Not Employed	57%	12%	7%	5%	4%	3%	12%
Analgesics-Opioid	Employed	66%	11%	6%	3%	3%	2%	9%
	Not Employed	52%	13%	7%	5%	4%	4%	14%
Mood Stabilizers	Employed	18%	13%	11%	9%	7%	7%	35%
	Not Employed	12%	12%	10%	9%	10%	8%	40%
Musculoskeletal Therapy Agents	Employed	74%	9%	4%	3%	2%	2%	7%
	Not Employed	59%	12%	6%	5%	4%	3%	12%

**Data Source:** Texas Department of Insurance, Workers' Compensation Research and Evaluation Group, 2011.

**Notes:** The study population includes 223,187 employees injured in 2005-2009 who also received Temporary Income Benefits (TIBs). Injury Year 2009 includes injuries that occurred through the fourth quarter of 2009.

**Description:** This table shows sustained employment outcomes for injured employees using four categories of pharmaceuticals, which are anti-inflammatory analgesics and opioid analgesics, mood stabilizers, and musculoskeletal therapy agents. Outcomes are measured at one to six months, and also one year from the injury. This data is provided for injury years 2005 to 2009.